Kindergarten Standards and Learning Activities

Strand: Number Sense and Operations

NUMBER SENSE

K.NSO–N.1. Count by ones to at least 20.

Example: Recite The Graceful Elephant, *a Mexican folktale, and tell what number comes after 11, after 12, etc.*

K.NSO–N.2. Represent, name, and order a set of objects (up to 20).

Example: Build towers with connecting cubes, then match the numeral cards to the towers.

K.NSO–N.3. Match quantities up to at least 10 with numerals and words.

Example: Using a picture of a house with six windows, place one counter onto each window, then count the windows, and circle the number that tells how many windows.

K.NSO–N.4. Compare sets of up to at least 10 concrete objects using appropriate language (e.g., none, more than, fewer than, same number of, one more than).

Example: Compare the blocks in two boxes. Tell which box contains more blocks and explain the way in which the answer was decided.

K.NSO–N.5. Identify positions of objects in sequences (e.g., first, second) up to fifth.

Example: Point out the fifth child from the front of a line of children.

K.NSO–N.6. Identify U.S. coins by name and determine their value.

Example: With a collection of pennies and nickels, count, then write the total amount of money.

FRACTIONS

K.NSO–F.7. Understand the concepts of whole and half.

Example: Working with an even number of connecting cubes to make one whole train, break the train into two equal parts or halves.

COMPUTATION AND OPERATIONS

K.NSO–C.8. Use objects and drawings to model and solve related addition and subtraction problems to 10.

Example: Working with cubes in two colors, put together 3 blue cubes with 2 yellow cubes, then count the total number of cubes.

ESTIMATION

K.NSO–E.9. Estimate the number of objects in a group and verify results.

Example: Estimate the number of marbles in a bag by inspection. Then remove and count the marbles and compare the estimate to the count.

Strand: Patterns, Relations, and Algebra

K.PRA.1. Identify the attributes of objects as a foundation for sorting and classifying.

Example: Group a collection of objects by something they have in common, e.g., a red truck, a red block, and a red ball share the attribute of being red; a square block, a square cracker, and a square book share the attribute of being square. Explain the grouping.

K.PRA.2. Sort and classify objects by attributes and explain; identify objects that do not belong to a particular group.

Example: Sort objects by color, shape, size, number, and other properties (e.g., all these objects are red; those are green). Explain the choices.

K.PRA.3. Identify, reproduce, describe, extend, and create color, rhythmic, shape, number, and letter repeating patterns with simple attributes.

Example: ○ □ ↑ ○ □ ↑ ○ __ __ __

1 2 3 4 5 6 7 8 9 10

Ask students to identify the pattern and draw shapes 8, 9, and 10.

K.PRA.4. Count by fives and tens up to at least 50.

Strand: Geometry

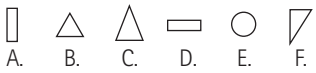
K.G.1. Name shapes of pattern blocks (e.g., triangle, square, circle).

Example:

1. Count the sides of each shape.

2. Count the corners of each shape.

3. Tell the name of each shape.



A. B. C. D. E. F.

K.G.2. Describe attributes of two-dimensional shapes (e.g., number of sides, number of corners, size, roundness); sort these shapes.

Example: Compare the number of sides of triangles, squares, and circles.

K.G.3. Identify and compare three-dimensional shapes.

Example: Compare the number of sides of a sphere, box, and pyramid.

K.G.4. Identify positions of objects in space and use appropriate language to describe and compare their relative positions.

Example: Explore positions in space (up-down, over-under, high-low, behind-in front of, inside-outside, below-on top) and relative distance between objects or locations (near-far, next to, close to, besides, apart-together). For example, "Name objects that are near your desk, objects that are in front of it, and objects far away from it."

Strand: Measurement

K.M.1. Recognize and compare objects with respect to the attributes of length, volume/capacity, weight, area, and time using appropriate language.

Example: Use a scale or balance to determine if 20 crayons are heavier than a shoe. Other comparisons include longer, taller, shorter, same length; lighter, same weight; holds more, holds less, holds the same amount.

K.M.2. Make and use estimates of measurements from everyday experiences.

Example: Estimate 1) how many cups of water are needed to fill a large container, 2) which container will hold the most jelly beans, or 3) the number of beads needed to make a necklace or bracelet. Count or measure to verify the actual results of the students' estimates.

K.M.3. Use standard and nonstandard units to measure length.

Example: Use paper clips to measure crayons, pencils, and rulers. Compare the lengths of these objects to each other and use appropriate vocabulary to describe them.

K.M.4. Order events in a day.

Example: Read the big book Around the Clock with Harriet. *After mixing up the events and times, put them in order.*

Example: Tell in order what you did today.

K.M.5. Tell time to the nearest hour.

Example: Show recess time on a digital clock and transfer it to an analog clock.

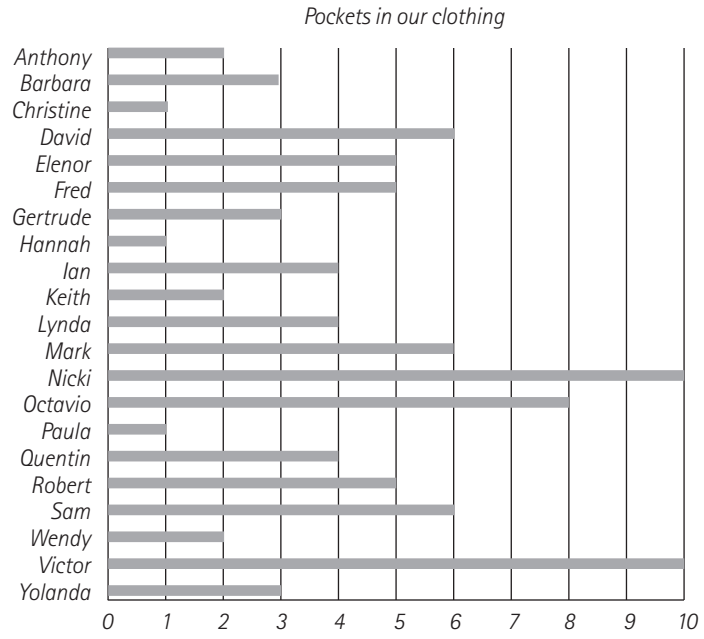
K.M.6. Identify U.S. coins and their value.

Example: Determine how many pennies have the same value as two nickels.

Strand: Data Analysis, Statistics, and Probability

K.DASP.1. Gather data about self and the environment to answer questions of interest to children; record the results using concrete graphs and simple picture graphs to display data.

Example: Create a bar graph that illustrates the number of pockets in classmates' clothes.



K.DASP.2. Describe relationships displayed in graphs, tables, or other representations.

Example: Using chips to represent objects in the stories below, who has more hats?

Story 1
Ms. Chapeau has large floppy hats. Put down one chip for each hat.
Ms. Chapeau has a red hat with stars.
She has a pink hat with flowers.
She has a green hat with ribbons.
She has a blue hat with feathers.
How many large floppy hats does she have?

Story 2
Mr. Miller has animal hats. Put down one chip for each hat.
Mr. Miller has a zebra hat with stripes.
He has a snake hat with scales.
He has a dog hat that barks.
How many animal hats does he have?